

AMENDMENTS TO THE CLAIMS

1-11. (Cancelled)

12. (New) A method for checking trial-run prototypes/modules using an Enterprise Resource Planning (ERP) server of an inventory management system of a manufacturing industry, the Enterprise Resource Planning server decreases overstocks in inventory through a material exploding method, the method comprising:

receiving at least one build order through the Enterprise Resource Planning server;

determining if the build order is for a trial-run prototype/module;

transferring the build order back to a storage media if the build order is for a trial-run prototype/module;

exploding a bill of material for the build order through the Enterprise Resource Planning server;

integrating the bill of material to store the bill of material back to the storage media through the Enterprise Resource Planning server.

13. (New) The method of claim 12, wherein the build order includes information about at least facility and required quantity of the trial-run prototype/module.

14. (New) The method of claim 12, wherein the storage media provides a plurality of columns to allow various contents in storage.

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15. (New) The method of claim 12, wherein the step of exploding the bill of material comprises the steps of:

- exploding all bills of material of the trial-run prototype/module;
- combining modules at a first level of the bill of material;
- exploding the first level of the bill of material;
- exploding a second level of the bill of material; and
- repeatedly exploding each level of the bill of material to a last level of the bill of material.

16. (New) The method of claim 15, wherein the bill of material is a product tree of an enterprise.

17. (New) The method of claim 15, wherein the bill of material comprises at least one common material and at least one specific material.

18. (New) The method of claim 17, wherein the common material relates to a general component or part needed for all prototypes/modules, and is evaluated by pre-set column through the Enterprise Resource Planning server.

19. (New) The method of claim 17, wherein the specific material relates to a particular component or part needed for respective prototypes/modules, the kind of components and parts among which fail to overlap in common.

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20. (New) The method of claim 12, wherein the step of the Enterprise Resource Planning server exploding the bill of material of the build order comprises the step of adding parent modules of the build order together and calculating required materials of respective sub-modules, and then totaling them.

21. (New) The method of claim 20, wherein the step of the Enterprise Resource Planning server integrating the bill of material comprises the step of utilizing inventory quantity deducted reserved stock to generate an available quantity for the trial-run prototype/module.

22. (New) The method of claim 21, wherein the step of storing the bill of material back to the storage media stores part numbers and quantities of stock-outs for the trial-run prototype/module into columns provided by the storage media.

23. (New) The method of claim 12, wherein the step of the Enterprise Resource Planning server integrating the bill of material comprises the step of utilizing inventory quantity deducted reserved stock to generate an available quantity for the trial-run prototype/module.

24. (New) The method of claim 12, wherein the step of storing the bill of material back to the storage media stores part numbers and quantities of stock-outs for the trial-run prototype/module into columns provided by the storage media.